Iowa Department of Natural Resources
Environmental Protection Commission

ITEM **15** **DECISION**

TOPIC Final Rule - Chapter 135, Technical Standards and Corrective Action Requirements for Owners and Operators of Underground Storage Tanks

The Department presents these rules for adoption and filing by Commission meeting in order to satisfy the requirements of the Iowa Act and the Federal Act. The Commission filed the rules for Notice of Intended Action in the August 1, 2007 Iowa Administrative Bulletin, ARC 6072B.

The Department proposed and the Iowa Legislature passed legislation (SF 499/HF792) (Iowa Act) this past session granting rulemaking authority to the Commission in response to provisions of the Federal Energy Act of 2005 (Federal Act). The Iowa Act requires the Commission to adopt rules requiring that all new underground storage tank (UST) and piping installations and replacements after August 1, 2007 be constructed to provide secondary containment (i.e. double walled tanks and piping) if they are within 1,000 feet of any public water supply system or a potable drinking water well. The Iowa Act also requires that "under dispenser containment) systems be installed whenever dispensers are replaced. The Iowa Act requires the Commission to adopt rules implementing a process to prohibit the delivery of fuel to UST facilities which are determined to be out of compliance with designated operation and maintenance requirements such as release detection, overfill and spill protection and corrosion protection.

No significant changes were made based on the public comments received. Enclosed is a summary of the comments received from the Petroleum Marketers and Convenience Stores of Iowa (PMCI) and the Iowa Water Well Association and the department's responses.

Wayne Gieselman
Administrator
Environmental Protection Division

October, 2007

ENVIRONMENTAL PROTECTION COMMISSION[567]

Adopted and Filed

Pursuant to the authority of Iowa Code section 455B.474, the Environmental Protection Commission is adopting rule changes to Chapter 135, "Technical Standards and Corrective Action Requirements for Owners and Operators of Underground Storage Tanks," Iowa Administrative Code. The Notice of Intended Action was published as ARC 6072B in the August 1, 2007 issue of the Iowa Administrative Bulletin

The Iowa Legislature passed legislation (2007 Iowa Acts, Senate File 499) granting rule–making authority to the Environmental Protection Commission in response to provisions of the federal Energy Policy Act of 2005 (Federal Act). The Iowa legislation requires the Commission to adopt rules consistent with Environmental Protection Agency guidance (see http:// www.epa.gov/OUST/index.htm) requiring that all new underground storage tank and piping installations and replacements be constructed to provide secondary containment (i.e., double–walled tanks and piping) if they are within 1,000 feet of a community water system or a potable drinking water well. Under–dispenser containment systems must also be installed whenever new dispensers are installed or dispensers are replaced. The legislation required adoption of rules consistent with EPA guidance to authorize a mechanism to prohibit the delivery of regulated substances to UST systems that are out of compliance with operation and maintenance rules.

The Iowa legislation required that all new and replacement UST systems installed after August 1, 2007, comply with EPA secondary containment guidance until Commission rules are adopted. The rules require secondary containment for all new underground storage tank and piping installations and replacements unless an exception can be proved by the tank owner. Most sites with an underground storage tank system provide water onsite and will be within 1,000 feet of a community water system or a potable drinking water well. Exceptions from the requirement to install secondary containment will be rare.

The replacement of piping with secondary containment is required when more than ten feet of piping is replaced. Under–dispenser containment is required when a dispenser is replaced along with changes in piping under the dispenser or when ten feet or more of piping is replaced within ten feet of the dispenser.

EPA guidance requires that states consider an exception to the delivery prohibition remedy if it would jeopardize the availability of and access to fuel delivery in rural or remote areas. The Department determined through mapping of all registered UST sites in Iowa, that prohibiting fuel, though inconvenient, should not substantially jeopardize availability and access to fuel. Though Iowa is an agricultural state, a person is within 10-15 miles of two or more existing service stations. Furthermore, as stated in the rule, except in emergencies and cases where USTS are leaking, owners and operators will be given the opportunity to sell remaining fuel. This should give them the opportunity to advise customers of the need to seek alternative fuel sources until re-delivery of fuel is authorized. The need for a process to exempt UST systems from delivery prohibition was considered to be unnecessary.

The amendments broaden the existing UST registration and annual tank management fee tagging system to require owners and operators to certify compliance with spill and overfill, release detection, and corrosion protection rules. UST systems that are potentially out of compliance would also be identified through biennial third–party compliance inspections and inspections of facilities by the Department.

The amendments establish criteria for determining noncompliance sufficient to warrant imposition of the delivery prohibition. Minimum procedural due process such as notice and an opportunity to contest the factual and legal basis for the delivery prohibition is provided to the owner and operator prior to its initiation. UST facilities may be designated as operating under "provisional" status if they are found to have a pattern of violations. Owners and operators would be offered a remedial plan, and if they fail to satisfy the terms of the plan, owners and operators would then be subject to the delivery prohibition after notice and an opportunity for a contested case hearing. This remedy is in addition to other enforcement mechanisms, such as the issuance of orders and the assessment of penalties.

Owners and operators subject to the delivery prohibition shall be required to return to the Department any registration tag or current annual tank management fee tag within three days. If the tags are not returned, the Department will attach a "red tag" to the UST fill pipe. It is illegal for an owner or operator to accept fuel or for a person to deposit fuel into a UST without current tags or with a "red tag."

In its comments to the rule, the Iowa Water Well Association asked that the exception to the secondary containment requirement for situations where the UST system installation would not be within 1,000 feet of a public well or other potable water well be removed. They stated secondary containment should be required of all new and replacement USTs regardless of their separation from any water well. With over 72% of Iowans relying on groundwater as their drinking water source, IWWA says it is imperative that we make every effort to ensure the safety and quality of Iowa's groundwater. Although the Department believes the policy of requiring only secondary containment systems is the better policy, the exception was left in because Iowa Code section 455B.474(7) requires that Commission rules be "consistent with" and "not exceed" the requirements of federal "regulations"; and the belief that it would be an extremely rare case where conditions for an exception could be met. The Federal Act and EPA guidance appear to limit the secondary containment requirement to situations where the installation is within 1,000 feet of a public or potable water well.

The department did receive other comments but no major changes were made to the rules. A copy of the comments and the departments responses can be requested by contacting Paul Nelson by mail Wallace State Office Building, Des Moines, Iowa 50319; fax (515)281- 8895; or E-mail paul.nelson@dnr.state.ia.us.

These amendments are intended to implement Iowa Code section 455B.474 as amended by 2007 Iowa Acts, Senate File 499.

The following amendments are adopted.

ITEM 1. Amend paragraph **135.1(3)"d"** as follows:

d. Deferrals. Rule 135.5(455B) does not apply to any UST system that stores fuel solely for use by emergency power generators. All new and replacement UST systems for emergency power generators must meet the secondary containment requirements in subrule 135.3(9) and the leak detection and delivery prohibition requirements in subrule 135.3(8).

ITEM 2. Amend rule **567—135.2(455B)** as follows:

Adopt the following **new** definitions in alphabetical order:

"Appurtenances" means devices such as piping, fittings, flanges, valves, dispensers and pumps used to distribute, meter, or control the flow of regulated substances to or from an underground storage tank.

"Dispenser" means equipment that is used to transfer a regulated substance from underground piping through a rigid or flexible hose or piping located aboveground to a point of use outside the underground storage tank system, such as a motor vehicle.

"Replace" or "replacement" means the installation of a new underground tank system or component, including dispensers, in substantially the same location as an existing tank system or component in lieu of that tank system or component.

"Secondary containment tank" or "secondary containment piping" means a tank or piping which is designed with an inner primary shell and a liquid–tight outer secondary shell or jacket which extends around the entire inner shell, and which is designed to contain any leak through the primary shell from any part of the tank or piping that routinely contains product, and which also allows for monitoring of the interstitial space between the shells and the detection of any leak.

"Under–dispenser containment (UDC)" means containment underneath a dispenser that will prevent leaks from the dispenser from reaching soil or groundwater. Such containment must:

- Be intact and liquid tight on its sides and bottom and at any penetrations;
- Be compatible with the substance conveyed by the piping; and
- Allow for visual inspection and monitoring and access to the components in the containment system.

Amend the definition of "pipe" or "piping" as follows:

"Pipe" or "piping" means a hollow cylinder or tubular conduit that is constructed of nonearthen materials <u>and that routinely contains and conveys regulated substances from the underground tank(s) to the dispenser(s) or other end–use equipment. Such piping includes any elbows, couplings, unions, valves, or other in–line fixtures that contain and convey regulated substances from the underground tank(s) to the dispenser(s). This definition does not include vent, vapor recovery, or fill lines.</u>

ITEM 3. Amend paragraph **135.3(3)"j"** as follows:

j. It is unlawful for a person to deposit or accept a regulated substance in an underground storage tank that has not been registered and issued permanent or annual tank management tags in accordance with rule 135.3(455B). It is unlawful for a person to deposit or accept a regulated substance into an underground storage tank if the person has received notice from the department that the underground storage tank is subject to a delivery prohibition or if there is a "red tag" attached to the UST fill pipe or fill pipe cap as provided in subrule 135.3(8).

(1) The department may provide written authorization to receive a regulated substance when there is a delay in receiving tank tags or at new tank installations to allow for testing the tank system.

(2) The department may provide known depositors of regulated substances lists of underground storage tank sites that have been issued tank tags, ~~and~~ those that have not been issued tank tags, and those subject to a delivery prohibition pursuant to subrule 135.3(8). These lists do not remove the requirement for depositors to verify that current tank tags are affixed to the fill pipe prior to delivering product. Regulated substances cannot be delivered to underground storage tanks without current tank tags or those displaying a delivery prohibition "red tag" as provided in subrule 135.3(8).

(3) A person shall not deposit a regulated substance in an underground storage tank after receiving written or oral notice from the department that the tank is not covered by an approved form of financial responsibility in accordance with 567—Chapter 136.

ITEM 4. Amend paragraph **135.3(5)"d"** as follows:

d. A person who conveys or deposits a regulated substance shall inspect the underground storage tank to determine the existence or absence of a current registration tag, a current annual tank management fee tag, or a delivery prohibition "red tag" as provided in subrule 135.3(8). If the tag is not affixed to the fill pipe or fill pipe cap or if a delivery prohibition "red tag" is displayed, the person ~~may~~ shall not deposit the substance in the tank.

ITEM 5. Adopt **new** subrules 135.3(8) and 135.3(9) as follows:

135.3(8) Delivery prohibition process.

a. Identifying sites subject to delivery response prohibition action.

(1) Annual registration tag and tank management fee process. Owners and operators shall certify to the following on a form prepared by the department when applying for annual tank tags pursuant to subrule 135.3(5):

1. Installation and performance of an approved UST and piping release detection method as provided in rule 135.5(455B), including an annual line tightness test and a line leak detector test if applicable.

2. Installation of an approved overfill and spill protection system as provided in paragraph 135.3(1)"c."

3. Installation of an approved corrosion protection system as provided in paragraphs 135.3(1)"a" and "b."

4. If the UST system has been out of operation for more than three months, that the UST system has been temporarily closed in accordance with rule 135.15(455B) and a certification of temporary closure has been submitted to the department.

5. If the UST system has been removed or filled in place within the last 12 months, the date of removal or filling in place and whether a closure report has been submitted as provided in rule 135.15(455B).

(2) Sites with provisional status. If the UST system has been classified as operating under provisional status as provided in paragraph 135.3(8)"c", owners and operators when applying for annual tank tags pursuant to subrule 135.3(5) must certify on a form prepared by the department that the owners and operators are in compliance with an approved provisional status remedial plan as provided in paragraph 135.3(8)"c".

(3) Compliance inspections. The department may initiate a delivery prohibition response action based on: (1) a finding resulting from a third–party compliance inspection conducted

pursuant to rule 135.20(455B); (2) a department investigation and inspection conducted pursuant to Iowa Code section 455B.475; or (3) review of a UST system check or other documentation submitted in response to a suspected release under rule 135.6(455B) or in response to a confirmed release under rule 135.7(455B).

b. Delivery prohibition eligibility criteria. A delivery prohibition response action may be initiated upon a finding that the UST system is out of compliance with department rules and meets the eligibility criteria as specified below. Reinstatement criteria define the standards and process for owners and operators to document that they have taken corrective action sufficient to authorize resumption of fuel to the USTs. Prior to initiation of the delivery prohibition, owners and operators are afforded a minimum level of procedural due process such as prior notice and the opportunity to present facts to dispute the finding. Where notice and the opportunity to take corrective action prior to initiation of a delivery prohibition response action are required, notice by the department or by a certified compliance inspector as provided in rule 135.20(455B) shall be sufficient.

If the department finds that any of the following criteria has been satisfied, the department may initiate a delivery prohibition response action following the notice procedures outlined in paragraph "e" of this subrule. After initiation of the delivery prohibition response action, the department will offer the owner or operator an opportunity to establish reinstatement criteria by written documentation and, if requested, an in–person meeting.

(1). An approved release detection method for USTs or UST piping is not installed, such as automatic tank gauging, groundwater monitoring wells and line leak detectors, and there is no record that an approved method such as inventory control, statistical inventory reconciliation, or interstitial space monitoring has been employed during the previous three months. If the owner

or operator claims to have documentation that an approved release detection method has been conducted, the owner or operator will be given two business days to produce the documentation.

REINSTATEMENT CRITERIA: The owner or operator must submit results of a passing UST system precision tightness test at the 0.1 gallon–per–hour leak rate in paragraphs 135.5(4)"c" and 135.5(5)"b." The owner or operator must also document installation and operation of an approved release detection system. This may include proof that a contract has been signed with a qualified statistical inventory reconciliation provider or that a qualified inventory control method has been implemented and training has been provided to onsite supervisory personnel.

(2). No documentation of a required annual line tightness test or line leak detector test has been provided, and the owner or operator has failed to conduct the required testing within 14 days of written notice by the department or a certified compliance inspector as provided in rule 135.20(455B).

REINSTATEMENT CRITERIA: The owner or operator must provide documentation of a passing line precision tightness test at the 0.1 gallon–per–hour leak rate in paragraph 135.5(5)"b" and a line leak detector test as provided in paragraph 135.5(5)"a."

(3). Overfill and spill protection is not installed.

REINSTATEMENT CRITERION: The owner or operator must provide documentation that overfill and spill protection equipment has been installed.

(4). A corrosion protection system is not installed or there is no record that an impressed current corrosion protection system has been in operation for the prior six months.

REINSTATEMENT CRITERIA: A manned entry tank integrity inspection must be completed prior to installation of a corrosion protection system, and the owner or operator must submit results of a passing UST system precision tightness test at the 0.1 gallon–per–hour leak

rate in paragraphs 135.5(4)“c” and 135.5(5)“b.” A corrosion protection analysis must be completed and approved by the department.

(5). The owner or operator has failed to provide proof of financial responsibility in accordance with 567—Chapter 136.

REINSTATEMENT CRITERION: The owner or operator must submit acceptable proof of financial responsibility in accordance with 567—Chapter 136.

(6). A qualified UST system release detection method is installed and is being used but the documentation or the absence of documentation is sufficient to question the reliability of the release detection over the past 12–month period. The owner or operator shall be notified of the deficiencies, shall be given at least two business days to produce documentation of compliance and, if necessary, shall be required to conduct a leak detection system analysis and a system tightness test within 14 days. If the owner or operator fails to produce documentation of compliance or to conduct the system analysis and the UST system precision tightness test at the 0.1 gallon–per–hour leak rate in paragraphs 135.5(4)“c” and 135.5(5)“b,” the department may initiate a delivery prohibition response action. Notice by the department or a compliance inspector as provided in rule 135.20(455B) shall be sufficient to initiate a delivery prohibition response action.

REINSTATEMENT CRITERIA: The owner or operator must submit documentation that the leak detection method analysis sufficiently documents compliance and explains the reasons for the accuracy and reliability concerns. If necessary, the owner or operator must submit passing results of a UST system precision tightness test at the 0.1 gallon–per–hour leak rate in paragraphs 135.5(4)“c” and 135.5(5)“b.”

(7). The owner or operator has failed to document completion of a three–year corrosion protection test or to repair defective corrosion protection equipment within 30 days after notice of the violation by the department or a certified compliance inspector as provided in rule 135.20(455B).

REINSTATEMENT CRITERION: The owner or operator must submit documentation of a three–year corrosion protection test as provided in rule 135.3(455B).

(8). The owner or operator has failed to complete a compliance inspection required by rule 135.20(455B) within 60 days after written notice of the violation by the department.

REINSTATEMENT CRITERION: The owner or operator must submit a compliance inspection report as provided in rule 135.20(455B).

(9). The owner or operator has failed to take necessary abatement action in response to a confirmed release as provided in subrules 135.7(2) and 135.7(3).

REINSTATEMENT CRITERION: The owner or operator must document compliance with the abatement provisions in subrules 135.7(2) and 135.7(3).

(10). The owner or operator has failed to undertake and document release investigation and confirmation steps within seven days in response to a suspected release as provided in paragraph 135.6(3)“a.”

REINSTATEMENT CRITERION: The owner or operator must document release confirmation and system check as provided in paragraph 135.6(3)“a.”

c. Provisional status. The department may classify a UST system as operating under a provisional status when the department documents a pattern of UST operation and maintenance violations under rules 135.3(455B) through 135.5(455B) and suspected release and confirmed release response actions under rules 135.6(455B) and 135.7(455B). The department shall

provide the owner or operator with a notice specifying the basis for the proposed classification and a proposed remedial action plan. The objective of the remedial action plan is to provide the owner and operator an opportunity to undertake certain remedial actions sufficient to establish a reasonable likelihood that future regulatory compliance will be achieved.

The remedial action plan may include but is not limited to provisions for owner/operator training, development of a facility–specific compliance manual, more frequent third–party compliance inspections than otherwise required under rule 135.20(455B), monthly reporting, and retention of a third–party compliance manager/consultant. If the owner or operator and the department cannot reach agreement on a remedial action plan, the department may initiate enforcement action by issuance of an administrative order pursuant to 567—Chapter 10. This provision does not grant the owner or operator an entitlement to this procedure, and the department reserves all discretion to undertake an enforcement action and assess penalties as provided in Iowa Code sections 455B.476 and 455B.477.

d. Administrative orders. The department may impose a delivery prohibition as a remedy for violations of the operation and maintenance provisions in rules 135.3(455B) through 135.5(455B) and the suspected and confirmed release response actions in rules 135.6(455B) and 135.7(455B). This remedy may be in addition to the assessment of penalties as provided in Iowa Code section 455B.476 and other appropriate injunctive relief necessary to correct violations.

e. Due Process Prior Initiation of a Delivery prohibition response action.

(1) Prior to imposing a delivery prohibition response action under paragraph 135.3(8)"b" above, the department will provide notice to the owner or operator or, if notice to the owner or operator cannot be confirmed, to a person in charge at the UST facility of the basis for the finding and the intent to initiate a delivery prohibition response action. Notice may be by verbal

contact, or by facsimile, regular or certified mail to the UST facility address or the owner or operators last known address. The owner and operator will be given a minimum of one business day to provide documentation that the finding is inaccurate or reinstatement criteria sub-paragraphs 135.3(8)"b" (1) through (5) have been satisfied. Additional days and the opportunity for a telephone or in-person conference may be provided the owner and operator to contest the factual basis for a finding under sub-paragraphs 135.3(8)"b" (6) through (10). Additional procedural due process may be afforded the owner and operator on a case by case basis sufficient to satisfy Constitutional due process standards.

If insufficient information is submitted to change the finding, the department will notify the owner or operator and a person in charge at the UST facility of the final decision to impose the delivery prohibition response action.

(2) Provisional status. Upon a finding that an owner or operator under provisional status has failed to comply with the terms of a remedial action plan as provided above, the department may initiate a delivery prohibition response action by giving actual notice to the owner or operator of the basis for the finding of noncompliance and the department's intent to initiate a delivery prohibition response action. The delivery prohibition response action shall not be imposed without providing the owner or operator the opportunity for an evidentiary hearing consistent with the provisions for suspension and revocation of licenses under 567—Chapter 7.

f. Delivery prohibition procedure. Upon oral or written notice that the delivery prohibition response action has been imposed, the owner or operator and any person in charge of the UST facility shall be notified that they are not authorized to receive any further delivery of regulated substances until conditions for reinstatement of eligibility are satisfied. Owners and operators are required to immediately remove and return to the department the current annual tank

management fee tags or the tank registration tags if there are no tank management fee tags. Owners and operators are required to provide the department with names and contact information for all persons who convey or deposit regulated substances to the USTs. The department will attempt to notify known persons who convey or deposit regulated substances to the USTs that they are not authorized to deliver to the USTs until further notice by the department as provided in paragraph 135.3(3)"j" and subrule 135.3(5).

If the tank tags are not returned within three business days, the department shall visit the site, remove the tags, and affix a "red tag" to the fill pipes or fill pipe caps of all affected USTs. It is unlawful for any person to deposit or accept a regulated substance into a UST that has a "red tag" affixed to the fill pipe or fill pipe cap. The department may allow the owner and operator to dispense and sell the remainder of existing fuel unless the department determines there is an immediate risk of a release or other risk to human health, safety or the environment. The department shall confirm in writing the basis for the delivery prohibition response action, contacts made prior to the action, and steps the owner or operator must take to reinstate fuel delivery.

135.3(9) Secondary containment requirements for new and replacement UST system installations. All new and replacement underground storage tank systems and appurtenances used for the storage and dispensing of petroleum products installed after [insert effective date of these amendments] shall have secondary containment in accordance with this subrule. The secondary containment provision includes the installation of turbine sumps, transition or intermediate sumps and under–dispenser containment (UDC).

a. The secondary containment may be manufactured as an integral part of the primary containment or constructed as a separate containment system.

b. Installation of any new or replacement turbine pumps involving the direct connection to the tank shall have secondary containment.

c. Any replacement of ten feet or more of piping shall have secondary containment.

d. All piping replacements requiring secondary containment shall be constructed with transition or intermediate containment sumps.

e. The design and construction of all primary and secondary containment shall meet the performance standards in subrule 135.3(1) and paragraphs 135.5(3)“b” and 135.5(4)“g.” At a minimum, the secondary containment must:

(1) Contain regulated substances released from the tank system until detected and removed;

(2) Prevent the release of regulated substances into the environment at any time during the operational life of the underground storage tank system; and

(3) Be checked for evidence of a release at least every 30 days as provided in paragraph 135.5(2)“a.”

f. Secondary containment with interstitial monitoring in accordance with 135.5(3)“b,” 135.5(4)“g” and 135.5(5)“d” shall become the primary method of leak detection for all new and replacement tanks and piping installed after [insert effective date of these amendments].

g. Testing and inspection. Secondary containment systems shall be liquid tight and must be inspected and sensing devices tested every two years.

(1) Inspections for secondary containment sumps (spill catchment basins, turbine sumps, transition or intermediate sumps, and under–dispenser containment) shall:

1. Consist of a visual inspection by an Iowa–licensed installer or Iowa–certified inspector every two years. Sumps must be intact (no cracks or perforations) and liquid tight, including sides and bottom.

2. Sumps must be maintained and kept free of debris, liquid and ice at all times.

3. Regulated substances spilled into any spill catchment basin, turbine sump, transition/intermediate sump or under–dispenser containment shall be immediately removed.

(2) Sensing devices used to monitor the interstitial space shall be tested at least every two years for proper function.

h. Under–dispenser containment. When installing a new motor fuel dispenser or replacing a motor fuel dispenser, a UDC shall be installed whenever:

(1) A motor fuel dispenser is installed at a location where there previously was no dispenser (new UST system or new dispenser location at an existing UST system); or

(2) An existing motor fuel dispenser is removed and replaced with another dispenser and the equipment used to connect the dispenser to the underground storage tank system is replaced. This equipment includes flexible connectors or risers or other transitional components that are beneath the dispenser and connect the dispenser to the piping. A UDC is not required when only the emergency shutoff or shear valves or check valves are replaced.

(3) A UDC shall also be installed beneath the motor fuel dispenser whenever ten feet or more of piping is repaired or replaced within ten feet of a motor fuel dispenser.

i. Exceptions from secondary containment standards. A tank owner or operator may request an exception from the secondary containment standard if the location of the UST system is greater than 1,000 feet from a community water system or potable drinking water well. A community water system includes the distribution piping.

(1) "Community water system (CWS)" means a public water system which has at least 15 service connections used by year–round residents or regularly serves at least 25 year–round residents. "Public water supply system" means a system for the provision to the public of water for human consumption through pipes or other constructed conveyances, if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year. Such term includes: any collection, treatment, storage, and distribution facilities under control of the operator of such system and used primarily in connection with such system; and any collection or pretreatment storage facilities not under such control which are used primarily in connection with such system. Such term does not include any "special irrigation district." A "public water supply system" is either a "community water system" or a "noncommunity water system."

(2) "Potable drinking water well" means any hole (dug, driven, drilled, or bored) that extends into the earth until it meets groundwater and that supplies water for a noncommunity public water system or supplies water for household use (consisting of drinking, bathing, and cooking or other similar uses). Such wells may provide water to entities such as a single–family residence, a group of residences, businesses, schools, parks, campgrounds, and other permanent or seasonal communities. A "noncommunity water system" is defined in rule 567—40.2(455B) as a public water system that is not a community water system. A "noncommunity water

system" is either a "transient noncommunity water system (TNC)" or a "nontransient noncommunity water system (NTNC)."

(3) To determine if a new or replacement underground storage tank, piping, or motor fuel dispenser system is within 1,000 feet of an existing community water system or an existing potable drinking water well, at a minimum the distance must be measured from the closest part of the new or replacement underground storage tank or piping or the motor fuel dispenser system to:

1. The closest part of the nearest existing community water system, including:

- The location of the wellhead(s) for groundwater and the location of the intake point(s) for surface water;
- Water lines, processing tanks, and water storage tanks; and
- Water distribution/service lines under the control of the community water system operator.

2. The wellhead of the nearest existing potable drinking water well.

(4) If a new or replacement underground storage tank, piping, or motor fuel dispenser that is not within 1,000 feet of an existing community water system will be installed, and a community water system that will be within 1,000 feet of the UST system is planned or a permit application has been submitted to the department under 567—Chapter 40, secondary containment and under–dispenser containment are required unless the permit is denied.

(5) If a new or replacement underground storage tank, piping, or motor fuel dispenser that is not within 1,000 feet of an existing potable drinking water well will be installed and the owner will be installing a potable drinking water well at the new facility, or a private water well permit has been submitted pursuant to 567—Chapter 38 and pursuant to applicable county and municipal ordinances for a potable drinking water well that will be within 1,000 feet of the UST system, secondary containment and under–dispenser containment are required unless the permit is denied.

j. Documentation for exception from secondary containment. The following documentation must be provided by the tank owner or operator when requesting an exception from the UST system secondary containment requirement.

(1) A statement from the manager of the local community water system that the community water system is not located or planned within 1,000 feet of the UST system location. This would include rural water systems.

(2) A map showing homes and businesses within 1,000 feet of the UST system location.

(3) Identification of the source of water for the business at the UST system location.

(4) The results of an on–foot search around businesses and homes within a 1,000–foot radius for possible potable drinking water wells. Documentation that there are no pending nonpublic water well permit applications within 1,000 feet of the UST system from any applicable municipal permitting authority, county department of health with department–delegated authority or the department if there is not delegated permitting authority.

(5) Search results from the Geographic Information System (GIS) well mapping for well locations available from the Iowa Geological Survey.

(6) Documentation that the department's water supply section has no pending applications for a public water supply construction permit within 1,000 feet of a proposed UST system installation or replacement or motor fuel dispenser installation or replacement.

ITEM 6. Amend paragraph **135.5(4)"g,"** subparagraph **(1)**, as follows:

g. Interstitial monitoring. Interstitial monitoring between the UST system and a secondary barrier immediately around or beneath it may be used, but only if the system is designed, constructed and installed to detect a leak from any portion of the tank that routinely contains product and also meets one of the following requirements:

(1) For ~~double–walled UST~~ secondary containment systems, the sampling or testing method ~~can~~ must be able *to* detect a release through the inner wall in any portion of the tank that routinely contains product~~;~~:

1. Continuously, by means of an automatic leak sensing device that signals to the operator the presence of any regulated substance in the interstitial space; or

2. Monthly, by means of a procedure capable of detecting the presence of any regulated substance in the interstitial space.

3. The interstitial space shall be maintained and kept free of liquid, debris or anything that could interfere with leak detection capabilities.

NOTE: The provisions outlined in the Steel Tank Institute's "Standard for Dual Wall Underground Storage Tanks" may be used as guidance for aspects of the design and construction of underground steel double–walled tanks.

ITEM 7. Adopt **new** paragraph **135.5(5)"d"** as follows:

d. Interstitial monitoring of secondary containment. Interstitial monitoring may be used for any piping with secondary containment designed for and capable of interstitial monitoring.

(1) Leak detection shall be conducted:

1. Continuously, by means of an automatic leak sensing device that signals to the operator the presence of any regulated substance in the interstitial space or containment sump; or

2. Monthly, by means of a procedure capable of detecting the presence of any regulated substance in the interstitial space or containment sump, such as visual inspection.

(2) The interstitial space or sump shall be maintained and kept free of water, debris or anything that could interfere with leak detection capabilities.

(3) At least every two years, any sump shall be visually inspected for integrity of sides and floor and tightness of piping penetration seals. Any automatic sensing device shall be tested for proper function.

Iowa Department of Natural Resources
Underground Storage Tank Section

Responsiveness Summary
Notice of Intended Action, ARC 46072B, IAB 8/1/07

Proposed amendments to 567--Chapter 135 IAC
UST Secondary Containment Requirement and
Delivery Prohibition for Out-of-Compliance UST Systems

Comments were received from the following:

Jeff Hove	Petroleum Marketers and Convenient Stores of Iowa (PMCI)
Paula S. Dierenfeld	Iowa Water Well Association (IWWA)

Comments were received on the following rules.

Preamble

Comment: PMCI asked for the basis of the department's determination that there are no remote or rural areas where a delivery prohibition would prevent access to a petroleum facility.

Response: Though Iowa is an agricultural state, a person is within 10-15 miles of two or more existing service stations. This was determined by mapping all active service stations by there GIS locations. A station shutting down, though inconvenient, should not cause the inability to obtain fuel.

567—135.3(3)"j" It is unlawful for a person to deposit or accept a regulated substance in an underground storage tank that has not been registered and issued permanent or annual tank management tags in accordance with rule 135.3(455B). *It is unlawful for a person to deposit or accept a regulated substance into an underground storage tank if the person has received notice that the underground storage tank is subject to a delivery prohibition or if there is a "red tag" attached to the UST fill pipe or fill pipe cap as provided in subrule 135.3(8).*

Comment: PMCI requested adding "from the department" for receiving notice of delivery prohibition.

Response: The department agreed and made the change.

567—135.3(3)"j"(1) The department may provide written authorization to receive a regulated substance when there is a delay in receiving tank tags or at new tank installations to allow for testing the tank system.

Comment: PMCI requested the "may" be replaced with "shall" for providing written authorization. They felt the severe nature of the new delivery prohibition rules that industry should be assured the department has the ability to produce written authorization in case tank tags cannot be received in a timely manner.

Response: This part of the rule has been in place since for the past 15 years to allow the department to allow fuel delivery in this situation. The new delivery prohibition rules do not change anything or make it any more severe. Authorization to deliver is often done over the phone with the tanker truck waiting with e-mail follow-up sent to the fuel provider at the same time. It generally occurs when tank tags are lost or when payment of tank fees occurs just before new tags are required. No problems have occurred and the tank operators have been able to continue to operate. No change in the rule is needed.

567—135.3(3)"j"(2) The department may provide known depositors of regulated substances lists of underground storage tank sites that have been issued tank tags, ~~and~~ those that have not been issued tank tags*, and those subject to a delivery prohibition pursuant to subrule 135.3(8)*. These lists do not remove the requirement for depositors to verify that current tank tags are affixed to the fill pipe prior to delivering product. Regulated substances cannot be delivered to underground storage tanks without current tank tags *or those displaying a delivery prohibition "red tag" as provided in subrule 135.3(8).*

Comment: PMCI said the department has the ability to track the status of USTs and note when a tank should not be provided with fuel. EPA guidance requires making this information available. Why does the department feel this is elective?

Response: The department has provided lists of sites without tags and cannot receive fuel and sites with tags that can receive fuel on the DNR internet site for years. The language was changed to include red tagging of tanks. The department will be including red tagged tanks to the delivery prohibition list.

567---135.3(3)"j"(3) A person shall not deposit a regulated substance in an underground storage tank after receiving written or oral notice from the department that the tank is not covered by an approved form of financial responsibility in accordance with 567—Chapter 136.

Comment: PMCI requested removal of "oral notice". They feel notices of non-compliance must be made in writing to alleviate confusion when the responsible party is not available.

Response: This paragraph in the rule has not changed since implementation of financial responsibility requirements. Financial responsibility is something you either have or don't have. The owner is always the person contacted for providing proof of financial responsibility. There is never any question with the owner or operator contacted whether they have proof of financial responsibility in their response. No problems have occurred. No change was made.

567---135.3(5)"d" A person who conveys or deposits a regulated substance shall inspect the underground storage tank to determine the existence or absence of a current registration tag*, a current annual tank management fee tag, or a delivery prohibition "red tag" as provided in subrule 135.3(8)*. If the tag is not affixed to the fill pipe or fill pipe cap *or if a delivery prohibition "red tag" is displayed*, the person ~~may~~ *shall* not deposit the substance in the tank.

Comment: PMCI requested adding "unless written authorization is given to do so, by the department" before fuel delivery would be allowed.

Response: Adding this would limit the flexibility for an immediate response when tags are simply lost and a replacement tag is needed. Many times the tank truck driver is on site when we receive a call to check on the possibility of a delivery being able to be made. Currently oral approvals for delivery are provided and accompanied by a letter e-mailed to the supplier or transporter if the tag has been lost or not arrived at tag renewal time. The language was not added.

135.3(8)"b"(2)(1) A qualified UST system release detection method is installed and is being used but the documentation or the absence of documentation is sufficient to question the reliability of the release detection over the past 12–month period. The owner or operator shall be notified of the deficiencies, shall be given at least two business days to produce documentation of compliance and, if necessary, shall be required to conduct a leak detection system analysis and a system tightness test within 14 days. If the owner or operator fails to produce documentation of compliance or to conduct the system analysis and the UST system precision tightness test at the 0.1 gallon–per–hour leak rate in paragraphs 135.5(4)"c" and 135.5(5)"b," the department may initiate a delivery prohibition response action. Notice by the department <u>or a compliance inspector</u> as provided in rule 135.20(455B) shall be sufficient to initiate a delivery prohibition response action.

Comment: PMCI requested "or a compliance inspector" in the last sentence be removed since compliance inspectors are not agents of the state and should not be in a position to give notice resulting in the prohibition of a delivery prohibition response.

Response: The compliance inspections conducted by the third party inspectors are the department's compliance inspections. Any problem found and reported to the owner or operator requires a response and can result in enforcement action from the department. The department will normally not be taking any action until 60 days after the inspection to allow corrective

action by the owner or operator but reserves the right to take enforcement action at any time. Being able to take enforcement action based on the third party inspections is a concern with the US EPA for a viable UST program. No change was made.

135.3(9)"c" Any replacement of ten feet or more of piping or the replacement of piping within ten feet of a dispenser or containment sump shall have secondary containment.

Comment: PMCI requested "or the replacement of piping within ten feet of a dispenser or containment sump" be stricken. They felt their previous comments at a stakeholders meeting was taken out of context concerning this provision. PMCI considers the paragraph as written would be undue burden on industry and create little or no benefit to the environment.

Response: This language was discussed at the stakeholders meeting prior to writing the rule. There may have been some confusion on what was understood. Part of the discussion was if you were breaking up concrete and replacing piping near a sump or dispenser island, it was an appropriate time to install a sump with containment or under dispenser containment. This is included in 135.3(9)"h"(3) so t*he language here has been removed.*

135.3(9)"f" Secondary containment with interstitial monitoring in accordance with 135.5(3)"b," 135.5(4)"g" and 135.5(5)"d" shall become the primary method of leak detection for all new and replacement tanks and piping installed after [insert effective date of these amendments].

Comment: PMCI states the EPA guidelines include a monitoring requirement for the interstice but that the guidelines do not require interstitial monitoring be the primary form of leak detection. They felt this paragraph exceeds EPA's guidance and should be removed. Paragraph 135.3(9)"e"(3) accurately spells out EPA requirements for monitoring the interstice.

Response: Monitoring the secondary containment for leak detection is the reason the Energy Policy Act required secondary containment and is required in the EPA guidance. When you catch a leak in the secondary containment system, no release to the environment occurs. The rule makes it clear to the tank owner and operator that interstitial monitoring must be used for release detection. They can perform as many other forms of leak detection as they want, but they are only required to do interstitial monitoring. It is the prime method of leak detection by default. No change was made.

135.3(9) "g Testing and inspection. Secondary containment systems shall be liquid tight and must be inspected and tested every two years.

Comment: PMCI requested that "and tested" be removed since it is the sensors that are tested every two years. They felt the sentence implied testing of the interstice.

Response: The paragraph is an introduction to the paragraphs that follow that provide more detail. "Sensing devices" was added before "tested" in the sentence to make this distinction clear.

135.3(9)"h"(2) An existing motor fuel dispenser is removed and replaced with another dispenser and the equipment used to connect the dispenser to the underground storage tank system is replaced. This equipment includes unburied flexible connectors or risers or other transitional components that are beneath the dispenser and connect the dispenser to the piping. A UDC is not required when only the emergency shutoff or shear valves or check valves are replaced.

Comment: PMCI suggested combining the second and third sentences for clarification to: UDC is only required when, during the process of replacing a dispenser, work is performed below the shear valve and the emergency shut-off valve.

Response: The department feels the more detailed paragraph should remain.

135.3(9)"h"(3) A UDC shall also be installed beneath the motor fuel dispenser whenever ten feet or more of piping is repaired or replaced within ten feet of a motor fuel dispenser.

Comment: PMCI requested the paragraph be deleted. They felt it overly burdensome and creates a situation where a minor repair will result in the closing of business for an extended period of time.

Response: This paragraph was discussed in the stakeholders meeting prior to proposing these rules. Since concrete or asphalt was being removed to replace the piping near a dispenser, it was an appropriate time to remove the concrete dispenser island and install UDC. It is not the intention to require UDC installation for a minor repair. The sentence has been changed by inserting "ten feet or more of" before "piping repaired or replaced within ten feet of a motor fuel dispenser."

135.3(9) "i" and "j" Exceptions from secondary containment standards and documentation for exception from secondary containment.

Comment: The IWWA objected to these paragraphs that allow the department to grant an exception to the secondary containment requirement if the UST location is more than 1,000 feet from a community water system or potable drinking water well. They stated secondary containment should be required of all new and replacement USTs. With over 72% of Iowans relying on groundwater as their drinking water source, IWWA says it is imperative that we make every effort to ensure the safety and quality of Iowa's groundwater. EPA guidelines provide minimum requirements and allow states to develop more stringent requirements. When it comes to protecting the primary source of Iowans' drinking water from contamination, the IWWA believes Iowans expect our states policies to require more than just the minimum.

The IWWA was also concerned if a tank is not secondarily contained that it could become a basis for decisions for denying permit to construct a drinking water well within a 1,000 feet of a UST. Though department has stated these rules only apply to USTs, IWWA requests a paragraph "k" be added that states, "Nothing in this subrule shall be construed to prohibit, limit, or restrict the installation of a potable drinking water well within 1,000 feet of an underground storage tank after an exception to the secondary containment standards is granted."

Response: The department agrees that it would be best to require secondary containment at all new and replacement UST systems. However, the exception to secondary containment as provided in EPA guidance is being kept in the rule. For the second part of their comments, the installation of drinking water wells is regulated by the departments' water supply section. We do not want to add language that may be construed to allow installation of a drinking water well when permitting is required by the Water Supply Section that may or may not allow the well to be installed..